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NOTICE OF ALLOWANCE AND FEE(S) DUE

24319 7590 LSI CORPORATION 1621 BARBER LANE

MS: D-106 MILPITAS, CA 95035 03/06/2008

EXAMINER
SIEK, VUTHE
ART UNIT PAPER NUMBER

2825

DATE MAILED: 03/06/2008

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/769,510	01/30/2004	Michael Eneboe	01-490/1C	8371

TITLE OF INVENTION: SYSTEM AND METHOD FOR OPTIMIZING AN INTEGRATED CIRCUIT DESIGN

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/06/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				eation of maintenance fees will be mailed to the current correspondence address as new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
LSI CORPOR 1621 BARBER MS: D-106	LANE	I b Sti ad	Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the States Postal Service with sufficient postage for first class mail in an en addressed to the Mail Stop ISSUE FEE address above, or being fa transmitted to the USPTO (571) 273-2885, on the date indicated below.				
MILPITAS, CA	. 95035						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
10/769,510	01/30/2004		Michael Eneboe			01-490/1C	8371
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nonprovisional	NO	\$1440	\$300	\$0		\$1740	06/06/2008
•	EXAMINER EXAMINER		CLASS-SUBCLASS			417 10	00,00,200
	VUTHE	ART UNIT 2825	716-016000				
"Fee Address" inc PTO/SB/47; Rev 03- Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un	AND RESIDENCE DATA less an assignee is ident th in 37 CFR 3.11. Comp	"Indication form led. Use of a Customer A TO BE PRINTED ON lifted below, no assignee	(1) the names of up or agents OR, alternation (2) the name of a single registered attorney or 2 registered patent attended in the listed, no name will be the PATENT (print or to data will appear on the T a substitute for filing at (B) RESIDENCE: (CIT	gle firm (having as agent) and the nan orneys or agents. If e printed. ype) patent. If an assign assignment.	a membe nes of up no name	entified below, the do	ocument has been filed for
Please check the appropri	riate assignee category or	categories (will not be pa	rinted on the patent):	Individual C	orporatio	on or other private gro	up entity Government
Advance Order -	are submitted: No small entity discount p # of Copies	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
_ 。 .	ns SMALL ENTITY statu	/	☐ b. Applicant is no lo	nger claiming SMA	LL ENT	ITY status. See 37 CF	R 1.27(g)(2).
NOTE: The Issue Fee ar interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	ed from anyone other than c Office.	the applicant; a reg	istered at	ttorney or agent; or the	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				-			
This collection of inform an application. Confider submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 22	ntiality is governed by 35 dapplication form to the ions for reducing this but Virginia 22313-1450. DC	CFR 1.311. The informatic JU.S.C. 122 and 37 CFR E USPTO. Time will vary rden, should be sent to the D NOT SEND FEES OR	on is required to obtain or 1.14. This collection is e 7 depending upon the ind the Chief Information Offic COMPLETED FORMS	retain a benefit by stimated to take 12 ividual case. Any c cer, U.S. Patent and FO THIS ADDRES	the public minutes omments Tradema S. SEND	c which is to file (and to complete, including on the amount of tin ark Office, U.S. Depa TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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	1621 BARBER LANE			ART UNIT	PAPER NUMBER		
MS: D-106	5025			2825			
MILPITAS, CA 9	5055			DATE MAILED: 03/06/2008			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 181 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 181 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)
	10/769,510	ENEBOE ET AL.
Notice of Allowability	Examiner	Art Unit
	Vuthe Siek	2825
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to communication filed 1	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to and MPEP 1308.	olication. If not included will be mailed in due course. THIS
2. $igthed{igwedge}$ The allowed claim(s) is/are <u>1-5, 7-12 and 21 (Renumbering</u>	g per 37 CFR 1.126 <u>)</u> .	
3. Acknowledgment is made of a claim for foreign priority una All b Some* c None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the content of the proper in the content of the proper in the content of	been received. been received in Application No cuments have been received in this is of this communication to file a reply a ENT of this application. itted. Note the attached EXAMINER' es reason(s) why the oath or declarate on's Patent Drawing Review (PTO- as Amendment / Comment or in the Comment or in the Comment of BIOLOGICAL MATERIAL in sit of BIOLOGICAL MATERIAL in	national stage application from the complying with the requirements S AMENDMENT or NOTICE OF tion is deficient. 948) attached office action of the back) of the complying with the front (not the back) of the complying in the submitted. Note the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 7. ☒ Examiner's Amendn 8. ☒ Examiner's Stateme 9. ☐ Other /Vuthe Siek/ Primary Examiner, Art Unit	(PTO-413), e nent/Comment ent of Reasons for Allowance

Application/Control Number: 10/769,510 Page 2

Art Unit: 2825

DETAILED ACTION

1. This office action is in response to application 10/769,510 and amendment filed on 12/3/2007. Claims 1-5, 7-12 and 21 remain pending in the application, where claims 6 and 13-20 are canceled.

Terminal Disclaimer

2. The terminal disclaimer filed on 2/13/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the patent [6,751,783] has been reviewed and is accepted. The terminal disclaimer has been recorded.

EXAMINER'S STATEMENT AS TO THE REASONS FOR ALLOWANCE

- 3. Claims 1-5, 7-12 and 21 are allowed over the prior art of record.
- 4. The following is an examiner's statement of reasons for allowance: the prior art of record does not teach or fairly suggest optimizing a physical configuration of the plurality of interconnects and components of the integrated circuit based on interconnect channel capacities, scalability of the interconnect channel capacities and isochronous interconnect configuration during designing an integrated circuit in combination of the claim limitations recited in claims 1 and 10. In addition, the optimization is based heuristic knowledge, through monitoring and experience in the utilization of chips, knowledge being derived pertaining to how the components interact, therefore the interconnects have the ability to scale, ability to act as a switch base, and as a packet phase to be optimized so that optimum performance is achieved.

Application/Control Number: 10/769,510 Page 3

Art Unit: 2825

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vuthe Siek whose telephone number is (571) 272-1906. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Vuthe Siek/ Primary Examiner, Art Unit 2825